

DOE ENERGY STORAGE SYSTEMS RESEARCH

ANNUAL PEER REVIEW AGENDA

November 10– 11, 2004
Washington Marriott Hotel
1221 22nd Street NW
Washington, DC 20037

Wednesday, November 10, 2004

- 7:45 AM** **Continental Breakfast**
- 8:30** **Welcome and Overview** – Dr. Imre Gyuk, DOE
- 8:40** **DOE Perspective** – DOE
- 9:00** **ESS Program Overview** – John Boyes, Sandia National Laboratories
- 9:20** **NYSERDA/DOE Joint Energy Storage Initiative** – Joe Sayer, NYSERDA
- 9:40** **CEC/ DOE Energy Storage Initiative**
- **Project Overview** – Pramod Kulkarni, CEC
 - **Data Management** – Doug Dorr, EPRI, PEAC
- 10:20** **Break**
- 10:40** **Boeing Superconducting Flywheel Development** – Philip Johnson, Boeing
- 11:00** **Bipolar Nickel Metal Hydride Battery Development and Testing** – Jamie Landi, EEI and Joe Waligorski, First Energy
- 11:20** **NanoMaterial-Based Electrodes for Energy Storage Devices** – Amit Singhal, NEI Corporation
- 11:40** **Lunch on your own**
- 1:00 PM** **Alternative Configurations to Optimize Lead-Acid Batteries for Renewable Generation and Storage, R&D and Testing for US Coast Guard** – Phil Symons, EECI
- 1:30** **Optically Isolated, HV/IGBT-Based, Megawatt, Cascaded Inverter Building Block for DER Applications and Low- cost, Modular, Highly Reliable Inverter** – Paul Duncan, Airak, Inc.
- 1:50** **Development of PCS Systems for Super Capacitors** – Dave Nichols, AEP
- 2:10** **Break**

- 2:30** **Integration and Testing of Energy Storage with FACTS Devices for Stability, Voltage Maintenance, and D/C Interaction** – Mariesa Crow, UMR
- 2:50** **ETO Switch Development for Power Conditioning** – Alex Huang, NCSU
- 3:10** **Inverter Packaging with Integral Liquid Cooled Heat Exchanger** – Larry Rinehart, RinehartMotion Systems
- 3:30 – 5:30** **INTERNATIONAL PERSPECTIVES ON ENERGY STORAGE**,
Panel Discussion, organized by the Electricity Storage Association (ESA)
- 5:00 – 7:30** **RECEPTION**, co-hosted by ESA and the US Energy Association

Thursday, November 11, 2004

- 8:30AM** **Impact of CAES on Wind in TX, OK, NM** – Nisha Desai, Ridge Energy
- 8:50** **CAES Projects in Iowa** – Bob Haug, Iowa Association of Municipal Utilities
- 9:10** **Overcoming Transmission Constraints: Energy Storage and WY Wind Power** –
Mindy Farber-DeAnda, SAIC
- 9:30** **EPRI-DOE Storage Handbook – Storage for Wind Resources** – Dan Mears,
Technology Insights
- 9:50** **Analysis of the NAS Battery Demonstration at AEP** – Ben Norris, Gridwise
- 10:10** **Break**
- 10:30** **Lead Carbon Supercapacitors Development** – Charles Koontz, AEP
- 10:50** **Comparison Testing of Supercapacitors** – Tom Hund, Sandia
- 11:10** **Advanced, Lead-Acid Battery Improvement Studies** – Pat Moseley, ILZRO
- 11:30** **Lunch on your own**
- 1:00 PM** **Alaska Battery-Diesel System (Model Development; Lime Village Data (Acquisition & Analysis))** – Lumas Kendrick, Sentech
- 1:20** **Applying Bulk Energy Storage to HELCO Operational Issues**, Larry Markel, Sentech
- 1:40** **Value of Storage for Restructured Utilities** – Joe Iannucci, DUA
- 2:00** **Short vs. Long-term Energy Storage Technologies Assessment** – Susan Schoenung,
122 West
- 2:20** **The Value of Reliability Resources** – Joe Eto, LBL
- 2:25** **Energy Storage and the Cost of Darkness** – Dr. Imre Gyuk